

CLAIMS

1. A modular server system, comprising:
 - a midplane having a system management bus and a plurality of blade interfaces on the midplane, wherein the blade interfaces are in electrical communication with each other;
 - a server blade removeably connectable to one of the plurality of blade interfaces on the midplane, the server blade having a server blade system management bus in electrical communication with the system management bus of the midplane, and a network interface to connect to a network; and
 - a plurality of switch blades removeably and simultaneously connectable to one of the plurality of blade interfaces on the midplane, the switch blades being adapted to perform network switching.
2. The system according to claim 1, further including a power supply module removeably connectable to the midplane to provide power to the modular server system.
3. The system according to claim 1, further including a cooling fan module coupled to the modular server system to cool the modular server system.
4. The system according to claim 1, further including a media blade removeably connectable to one of the plurality of blade interfaces on the midplane, the media blade having at least one media device.
5. The system according to claim 1, wherein the midplane is a CompactPCI form factor.
6. The system according to claim 1, wherein the storage medium device is a hard disk drive.

7. The system according to claim 1, further including a chassis to house the midplane, the server blade, and the media blade.
8. The system according to claim 1, wherein the server blade and the media blade are adapted to be hot swapped.
9. The system according to claim 1, wherein the server blade and the media blade in combination form an individual server system.
10. The system according to claim 1, wherein the network interface is an Ethernet connector jack.
11. The system according to claim 1, wherein the media device is selected from the group consisting of a storage medium device, a graphics processing device, an audio processing device, and a streaming media processing device.
12. A modular server system, comprising:

a midplane having a system management bus, a first side, a second side, and a plurality of blade interfaces on the first side and the second side, wherein the blade interfaces on the first side are in electrical communication with the blade interfaces on the second side;

a plurality of server blades each removeably connectable to one of the plurality of blade interfaces on the first side of the midplane, the server blades each having a server blade system management bus in electrical communication with the system management bus of the midplane, and a network interface to connect to a network;

a plurality of switch blades removeably and simultaneously connectable to one of the plurality of blade interfaces on the midplane, the switch blades being adapted to perform network switching between any number of the server blades installed in the system, and between any of the server blades and an external network;

a power supply module removeably connectable to the midplane to provide power to the modular server system;

a cooling fan module coupled to the modular server system to cool the modular server system; and

a chassis to house the midplane, the server blades, the media blades, the power supply module, and the cooling fan module.

13. The system according to claim 12, further including a plurality of media blades each removeably connectable to one of the plurality of blade interfaces on the second side of the midplane, the media blades each having at least one storage medium device.
14. The system according to claim 12, wherein the midplane is a CompactPCI form factor.
15. The system according to claim 12, wherein the storage medium device is a hard disk drive.
16. The system according to claim 12, wherein the server blades and the media blades are adapted to be hot swapped.
17. The system according to claim 12, wherein at least one of the server blades and at least one of the media blades in combination form an individual server system.
18. The system according to claim 12, wherein the network interface is an Ethernet connector jack.
19. A modular server system, comprising:
 - a midplane having a system management bus, a first side, a second side, and a plurality of blade interfaces on the first side and the second side, wherein the

blade interfaces on the first side are in electrical communication with the blade interfaces on the second side;

a server blade removeably connectable to one of the plurality of blade interfaces on the first side of the midplane, the server blade having a server blade system management bus in electrical communication with the system management bus of the midplane, and a network interface to connect to a network;

a media blade removeably connectable to one of the plurality of blade interfaces on the second side of the midplane, the media blade having at least one storage medium device;

a second server blade removeably connectable to one of the plurality of blade interfaces on the first side of the midplane, the second server blade having a second server blade system management bus in electrical communication with the system management bus of the midplane, and a second network interface to connect to the network

a second media blade removeably connectable to one of the plurality of blade interfaces on the second side of the midplane, the second media blade having at least one second storage medium device;

at least two switch blades, both removeably and simultaneously connectable to one blade interface on the midplane and adapted to perform network switching between any number of the server blades installed in the system, and between any of the server blades and an external network;

a power supply module removeably connectable to the midplane to provide power to the modular server system;

a cooling fan module coupled to the modular server system to cool the modular server system; and

a chassis to house the midplane, the server blade, the media blade, the second server blade, the second media blade, the switch blades, the power supply

module, and the cooling fan module, wherein the server blade, the media blade, the second server blade, the second media blade and the switch blades share power from the power supply module and share cooling from the cooling fan module.

20. The system according to claim 19, wherein the midplane is a CompactPCI form factor.
21. The system according to claim 19, wherein the storage medium device and the second storage medium device are hard disk drives.
22. The system according to claim 19, wherein the server blade, the media blade, the second server blade, and the second media blade are adapted to be hot swapped.
23. The system according to claim 19, wherein the server blade and the media blade in combination form an individual server system.
24. The system according to claim 19, wherein the second server blade and the second media blade in combination form an individual server system.
25. The system according to claim 19, wherein the server blade, the second server blade, and the media blade in combination form two individual server systems.
26. The system according to claim 19, wherein the server blade, the media blade, and the second media blade in combination form an individual server system.
27. The system according to claim 19, wherein the network interface and the second network interface are Ethernet connector jacks.